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Title: MULTI-LAYER WIRING BOARD AND ITS MANUFACTURE ;

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Equivalents: ;

ABSTRACT:

PROBLEM TO BE SOLVED: To establish both the connection reliability of a non-penetration connection hole with a small diameter and the insulation reliability between inner-layer and outer-layer circuit conductors, by making thick the thickness of the inner-layer circuit conductor of a part for forming the non-penetration connection hole as compared with that of other inner-layer circuit conductors, and by making thin the insulation layer of the part for forming the non-penetration connection hole. SOLUTION: The thickness of an inner-layer circuit conductor 5 of a part for forming a non-penetration connection hole (IVH) is thickened as compared with that of an inner-layer circuit conductor 6 of other parts, thus making thin the thickness of an insulation layer 7 of the part for forming the IVH as compared with the insulation layer 7 for covering other parts of the inner-layer circuit conductor. Therefore, when a non-penetration hole 9 is punched at the part of forming the IVH, a small aspect ratio and a superior punching property can be achieved since the thickness of the insulation layer 7 of the part is thin. Also, an absolutely electroless plating layer can be formed in the hole with a small diameter, thus simultaneously achieving the connection reliability of an IVH 19 with the small diameter of a multi-layer wiring board and the insulation reliability between the inner-layer circuit conductor 6 and an outer-layer circuit conductor 16.